

# CERTIFICATE OF EXPRESS MAIL UNDER 37 CFR 1.10

"Express Mail" Label No. EA 582845402 Date: 4-22-04  
 I hereby certify that this paper or fee is being deposited with the United States  
 Postal Service "Express Mail Post Office to Addressee" on the date indicated above  
 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA  
 22313-1450.

PTO/SB/05 (01-04)  
 Approved for use through 07/31/2006. OMB 0651-0032  
 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
 to respond to a collection of information unless it displays a valid OMB control number.

042204

0712 U.S. PTO

## UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))

Attorney Docket No. 37041-10876A

First Inventor William David Schaefer

Title: Multi-Layer Solid State Keyboard

Express Mail Label No. ER 582845402 US

22390 U.S. PTO  
10/829493

042204

### APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents

1. ☒ \*Fee Transmittal Form (e.g., PTO/SB/17)  
 (Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
 See 37 CFR 1.27.
3. ☒ Specification [Total Pages 10]  
 - Descriptive title of the invention  
 - Cross Reference to Related Applications  
 - Statement Regarding Fed sponsored R & D  
 - Reference to sequence listing, a table,  
 or a computer program listing appendix  
 - Background of the Invention  
 - Brief Summary of the Invention  
 - Brief Description of the Drawings (if filed)  
 - Detailed Description  
 - Claim(s)  
 - Abstract of the Disclosure
4. ☒ Drawings (35 U.S.C. 113) [Total Sheets 7]
5. Oath or Declaration [Total Pages 2]  
 a. ☐ Newly executed (original or copy)  
 b. ☐ Copy from a prior application (37 CFR 1.63(d))  
 (for continuation/divisional with Box 18 completed)  
 i. ☐ DELETION OF INVENTORS  
 Signed statement attached deleting inventor(s)  
 named in the prior application, see 37 CFR  
 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer  
 Program (Appendix)
8. ☐ Nucleotide and/or Amino Acid Sequence Submission  
 (if applicable, all necessary)  
 a. ☐ Computer Readable Form (CRF)  
 b. Specification Sequence Listing on:  
 i. ☐ CD-ROM or CD-R (2 copies) or  
 i.i. ☐ paper  
 c. ☐ Statements verifying identity of above copies

### ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS) PTO-1449  
☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
 (Should be specifically itemized)
15. ☐ Certified copy of Priority Document(s)  
 (If foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
 (b)(2)(B)(ii). Applicant must attach form PTO/SB/35  
 or its equivalent
17. ☐ Other

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment,  
 or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-In-Part (CIP) of prior application No. \_\_\_\_\_  
 Prior application information: Examiner \_\_\_\_\_ Group Art Unit \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under  
 Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.  
 The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

### 19. CORRESPONDENCE ADDRESS

[X] Customer Number: <b>02574</b>		Or [ ] Correspondence address below	
Name			
Address			
City		Zip Code	
Country		Telephone	Fax
Name (Print/Type)	Mark P. Vrla	Registration No. (Attorney/Agent)	43,973
Signature	<i>mlnl</i>	Date	4/22/04

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>FEE TRANSMITTAL</b> for FY 2004 <i>Effective 10/10/2003. Patent fees are subject to annual revision</i>				<b>Complete if Known</b>																																																																																																																																							
[ ] Applicant claims small entity status. See 37 CFR 1.27				Application Number		Unknown																																																																																																																																					
TOTAL AMOUNT OF PAYMENT <span style="float: right;">\$ 770</span>				Filing Date		April 22, 2004																																																																																																																																					
METHOD OF PAYMENT				First Named Inventor		William David Schaefer																																																																																																																																					
[ ] Check [ ] Credit card [ ] Money Order [ ] Other [ ] None				Examiner Name		Unknown																																																																																																																																					
[X] Deposit Account: Deposit Account Number : <b>10-0460</b> Deposit Account Name : <b>Jenner &amp; Block LLP</b>				Group Art Unit		Unknown																																																																																																																																					
The Commissioner is authorized to : <i>(check all that apply)</i>				Attorney Docket No.		37041-10876A																																																																																																																																					
[X] Charge fee(s) indicate below [X] Credit any overpayments				<b>FEE CALCULATION (continued)</b>																																																																																																																																							
[X] Charge any additional fee(s) during the pendency of this application				3. <b>ADDITIONAL FEES</b>																																																																																																																																							
[ ] Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.				<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Large Entity</th> <th style="text-align: left;">Small Entity</th> <th style="text-align: left;">Fee Description</th> <th style="text-align: left;">Fee Paid</th> </tr> <tr> <th>Fee Code (\$)</th> <th>Fee Code (\$)</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1051 130</td> <td>2051 65</td> <td>Surcharge-late filing fee or oath</td> <td>\$ _____</td> </tr> <tr> <td>1052 50</td> <td>2052 25</td> <td>Surcharge-late provisional filing fee or cover sheet</td> <td>\$ _____</td> </tr> <tr> <td>1053 130</td> <td>1053 130</td> <td>Non-English specification</td> <td>\$ _____</td> </tr> <tr> <td>1812 2,520</td> <td>1812 2,520</td> <td>For filing request for ex parte reexamination</td> <td>\$ _____</td> </tr> <tr> <td>1804 920*</td> <td>1804 920*</td> <td>Requesting publication of SIR prior to Examiner action</td> <td>\$ _____</td> </tr> <tr> <td>1805 1,840*</td> <td>1805 1,840*</td> <td>Requesting publication of SIR after Examiner action</td> <td>\$ _____</td> </tr> <tr> <td>1251 110</td> <td>2251 55</td> <td>Extension for reply within 1<sup>st</sup> month</td> <td>\$ _____</td> </tr> <tr> <td>1252 420</td> <td>2252 210</td> <td>Extension for reply within 2<sup>nd</sup> month</td> <td>\$ _____</td> </tr> <tr> <td>1253 950</td> <td>2253 475</td> <td>Extension for reply within 3<sup>rd</sup> month</td> <td>\$ _____</td> </tr> <tr> <td>1254 1,480</td> <td>2254 740</td> <td>Extension for reply within 4<sup>th</sup> month</td> <td>\$ _____</td> </tr> <tr> <td>1255 2,010</td> <td>2255 1,005</td> <td>Extension for reply within 5<sup>th</sup> month</td> <td>\$ _____</td> </tr> <tr> <td>1401 330</td> <td>2401 165</td> <td>Notice of Appeal</td> <td>\$ _____</td> </tr> <tr> <td>1402 330</td> <td>2402 165</td> <td>Filing a brief in support of appeal</td> <td>\$ _____</td> </tr> <tr> <td>1403 290</td> <td>2403 145</td> <td>Request for oral hearing</td> <td>\$ _____</td> </tr> <tr> <td>1451 1,510</td> <td>1451 1,510</td> <td>Petition to institute public use proceeding</td> <td>\$ _____</td> </tr> <tr> <td>1452 110</td> <td>2452 55</td> <td>Petition to revive - unavoidable</td> <td>\$ _____</td> </tr> <tr> <td>1453 1,300</td> <td>2453 665</td> <td>Petition to revive - unintentional</td> <td>\$ _____</td> </tr> <tr> <td>1501 1,300</td> <td>2501 665</td> <td>Utility issue fee (or reissue)</td> <td>\$ _____</td> </tr> <tr> <td>1502 480</td> <td>2502 240</td> <td>Design issue fee</td> <td>\$ _____</td> </tr> <tr> <td>1503 640</td> <td>2503 320</td> <td>Plant issue fee</td> <td>\$ _____</td> </tr> <tr> <td>1460 130</td> <td>1460 130</td> <td>Petitions to the Commissioner</td> <td>\$ _____</td> </tr> <tr> <td>1807 50</td> <td>1807 50</td> <td>Processing fee under 37 CFR 1.17(q)</td> <td>\$ _____</td> </tr> <tr> <td>1806 180</td> <td>1806 180</td> <td>Submission of Information Disclosure Statement</td> <td>\$ _____</td> </tr> <tr> <td>8021 40</td> <td>8021 40</td> <td>Recording each patent assignment per property (times # properties)</td> <td>\$ _____</td> </tr> <tr> <td>1809 770</td> <td>2809 385</td> <td>Filing submission after final rejection (37 CFR § 1.129(a))</td> <td>\$ _____</td> </tr> <tr> <td>1810 770</td> <td>2810 385</td> <td>For each additional invention to be examined (37 CFR § 1.129(b))</td> <td>\$ _____</td> </tr> <tr> <td>1801 770</td> <td>2801 385</td> <td>Request for Continued Examination (RCE)</td> <td>\$ _____</td> </tr> <tr> <td>1802 900</td> <td>1802 900</td> <td>Request for expedited examination of a design application</td> <td>\$ _____</td> </tr> <tr> <td colspan="3">Other fee (specify)</td> <td>\$ _____</td> </tr> <tr> <td colspan="3">*Reduced by Basic Filing Fee Paid</td> <td>\$ _____</td> </tr> <tr> <td colspan="3" style="text-align: right;"><b>SUBTOTAL (3)</b></td> <td style="text-align: right;">\$ _____</td> </tr> </tbody> </table>				Large Entity	Small Entity	Fee Description	Fee Paid	Fee Code (\$)	Fee Code (\$)			1051 130	2051 65	Surcharge-late filing fee or oath	\$ _____	1052 50	2052 25	Surcharge-late provisional filing fee or cover sheet	\$ _____	1053 130	1053 130	Non-English specification	\$ _____	1812 2,520	1812 2,520	For filing request for ex parte reexamination	\$ _____	1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	\$ _____	1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	\$ _____	1251 110	2251 55	Extension for reply within 1 <sup>st</sup> month	\$ _____	1252 420	2252 210	Extension for reply within 2 <sup>nd</sup> month	\$ _____	1253 950	2253 475	Extension for reply within 3 <sup>rd</sup> month	\$ _____	1254 1,480	2254 740	Extension for reply within 4 <sup>th</sup> month	\$ _____	1255 2,010	2255 1,005	Extension for reply within 5 <sup>th</sup> month	\$ _____	1401 330	2401 165	Notice of Appeal	\$ _____	1402 330	2402 165	Filing a brief in support of appeal	\$ _____	1403 290	2403 145	Request for oral hearing	\$ _____	1451 1,510	1451 1,510	Petition to institute public use proceeding	\$ _____	1452 110	2452 55	Petition to revive - unavoidable	\$ _____	1453 1,300	2453 665	Petition to revive - unintentional	\$ _____	1501 1,300	2501 665	Utility issue fee (or reissue)	\$ _____	1502 480	2502 240	Design issue fee	\$ _____	1503 640	2503 320	Plant issue fee	\$ _____	1460 130	1460 130	Petitions to the Commissioner	\$ _____	1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	\$ _____	1806 180	1806 180	Submission of Information Disclosure Statement	\$ _____	8021 40	8021 40	Recording each patent assignment per property (times # properties)	\$ _____	1809 770	2809 385	Filing submission after final rejection (37 CFR § 1.129(a))	\$ _____	1810 770	2810 385	For each additional invention to be examined (37 CFR § 1.129(b))	\$ _____	1801 770	2801 385	Request for Continued Examination (RCE)	\$ _____	1802 900	1802 900	Request for expedited examination of a design application	\$ _____	Other fee (specify)			\$ _____	*Reduced by Basic Filing Fee Paid			\$ _____	<b>SUBTOTAL (3)</b>			\$ _____
Large Entity	Small Entity	Fee Description	Fee Paid																																																																																																																																								
Fee Code (\$)	Fee Code (\$)																																																																																																																																										
1051 130	2051 65	Surcharge-late filing fee or oath	\$ _____																																																																																																																																								
1052 50	2052 25	Surcharge-late provisional filing fee or cover sheet	\$ _____																																																																																																																																								
1053 130	1053 130	Non-English specification	\$ _____																																																																																																																																								
1812 2,520	1812 2,520	For filing request for ex parte reexamination	\$ _____																																																																																																																																								
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	\$ _____																																																																																																																																								
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	\$ _____																																																																																																																																								
1251 110	2251 55	Extension for reply within 1 <sup>st</sup> month	\$ _____																																																																																																																																								
1252 420	2252 210	Extension for reply within 2 <sup>nd</sup> month	\$ _____																																																																																																																																								
1253 950	2253 475	Extension for reply within 3 <sup>rd</sup> month	\$ _____																																																																																																																																								
1254 1,480	2254 740	Extension for reply within 4 <sup>th</sup> month	\$ _____																																																																																																																																								
1255 2,010	2255 1,005	Extension for reply within 5 <sup>th</sup> month	\$ _____																																																																																																																																								
1401 330	2401 165	Notice of Appeal	\$ _____																																																																																																																																								
1402 330	2402 165	Filing a brief in support of appeal	\$ _____																																																																																																																																								
1403 290	2403 145	Request for oral hearing	\$ _____																																																																																																																																								
1451 1,510	1451 1,510	Petition to institute public use proceeding	\$ _____																																																																																																																																								
1452 110	2452 55	Petition to revive - unavoidable	\$ _____																																																																																																																																								
1453 1,300	2453 665	Petition to revive - unintentional	\$ _____																																																																																																																																								
1501 1,300	2501 665	Utility issue fee (or reissue)	\$ _____																																																																																																																																								
1502 480	2502 240	Design issue fee	\$ _____																																																																																																																																								
1503 640	2503 320	Plant issue fee	\$ _____																																																																																																																																								
1460 130	1460 130	Petitions to the Commissioner	\$ _____																																																																																																																																								
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	\$ _____																																																																																																																																								
1806 180	1806 180	Submission of Information Disclosure Statement	\$ _____																																																																																																																																								
8021 40	8021 40	Recording each patent assignment per property (times # properties)	\$ _____																																																																																																																																								
1809 770	2809 385	Filing submission after final rejection (37 CFR § 1.129(a))	\$ _____																																																																																																																																								
1810 770	2810 385	For each additional invention to be examined (37 CFR § 1.129(b))	\$ _____																																																																																																																																								
1801 770	2801 385	Request for Continued Examination (RCE)	\$ _____																																																																																																																																								
1802 900	1802 900	Request for expedited examination of a design application	\$ _____																																																																																																																																								
Other fee (specify)			\$ _____																																																																																																																																								
*Reduced by Basic Filing Fee Paid			\$ _____																																																																																																																																								
<b>SUBTOTAL (3)</b>			\$ _____																																																																																																																																								
1. <b>BASIC FILING FEE</b>				FEE CALCULATION																																																																																																																																							
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Large Entity</th> <th style="text-align: left;">Small Entity</th> <th style="text-align: left;">Fee Description</th> <th style="text-align: left;">Fee Paid</th> </tr> <tr> <th>Fee Code (\$)</th> <th>Fee Code (\$)</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1001 770</td> <td>2001 385</td> <td>Utility filing fee</td> <td>\$ 770</td> </tr> <tr> <td>1002 340</td> <td>2002 170</td> <td>Design filing fee</td> <td>\$ _____</td> </tr> <tr> <td>1003 530</td> <td>2003 265</td> <td>Plant filing fee</td> <td>\$ _____</td> </tr> <tr> <td>1004 770</td> <td>2004 385</td> <td>Reissue filing fee</td> <td>\$ _____</td> </tr> <tr> <td>1005 160</td> <td>2005 80</td> <td>Provisional filing fee</td> <td>\$ _____</td> </tr> <tr> <td colspan="3" style="text-align: right;"><b>SUBTOTAL</b></td> <td style="text-align: right;"><b>\$ 770</b></td> </tr> </tbody> </table>				Large Entity	Small Entity	Fee Description	Fee Paid	Fee Code (\$)	Fee Code (\$)			1001 770	2001 385	Utility filing fee	\$ 770	1002 340	2002 170	Design filing fee	\$ _____	1003 530	2003 265	Plant filing fee	\$ _____	1004 770	2004 385	Reissue filing fee	\$ _____	1005 160	2005 80	Provisional filing fee	\$ _____	<b>SUBTOTAL</b>			<b>\$ 770</b>	2. <b>EXTRA CLAIM FEES FOR UTILITY AND REISSUE</b>																																																																																																							
Large Entity	Small Entity	Fee Description	Fee Paid																																																																																																																																								
Fee Code (\$)	Fee Code (\$)																																																																																																																																										
1001 770	2001 385	Utility filing fee	\$ 770																																																																																																																																								
1002 340	2002 170	Design filing fee	\$ _____																																																																																																																																								
1003 530	2003 265	Plant filing fee	\$ _____																																																																																																																																								
1004 770	2004 385	Reissue filing fee	\$ _____																																																																																																																																								
1005 160	2005 80	Provisional filing fee	\$ _____																																																																																																																																								
<b>SUBTOTAL</b>			<b>\$ 770</b>																																																																																																																																								
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Extra Claims</th> <th>Fee From Below</th> <th>FEE PAID</th> </tr> </thead> <tbody> <tr> <td>Total Claims</td> <td>1 - 20* =</td> <td>x 18</td> <td>= 0</td> </tr> <tr> <td>Independent Claims</td> <td>0 - 3** =</td> <td>x 86</td> <td>= 0</td> </tr> <tr> <td>Multiple Dependent</td> <td></td> <td></td> <td>=</td> </tr> </tbody> </table>					Extra Claims	Fee From Below	FEE PAID	Total Claims	1 - 20* =	x 18	= 0	Independent Claims	0 - 3** =	x 86	= 0	Multiple Dependent			=	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Large Entity</th> <th style="text-align: left;">Small Entity</th> <th style="text-align: left;">Fee Description</th> <th style="text-align: left;">Fee Paid</th> </tr> <tr> <th>Fee Code (\$)</th> <th>Fee Code (\$)</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1202 18</td> <td>2202 9</td> <td>Claims in excess of 20</td> <td>\$ _____</td> </tr> <tr> <td>1201 86</td> <td>2201 43</td> <td>Independent claims in excess of 3</td> <td>\$ _____</td> </tr> <tr> <td>1203 290</td> <td>2203 145</td> <td>Multiple dependent claim, if not paid</td> <td>\$ _____</td> </tr> <tr> <td>1204 86</td> <td>2204 43</td> <td>**Reissue independent claims over original patent</td> <td>\$ _____</td> </tr> <tr> <td>1205 18</td> <td>2205 9</td> <td>**Reissue claims in excess of 20 and over original patent</td> <td>\$ _____</td> </tr> <tr> <td colspan="3" style="text-align: right;"><b>SUBTOTAL</b></td> <td style="text-align: right;"><b>\$ 0</b></td> </tr> </tbody> </table>				Large Entity	Small Entity	Fee Description	Fee Paid	Fee Code (\$)	Fee Code (\$)			1202 18	2202 9	Claims in excess of 20	\$ _____	1201 86	2201 43	Independent claims in excess of 3	\$ _____	1203 290	2203 145	Multiple dependent claim, if not paid	\$ _____	1204 86	2204 43	**Reissue independent claims over original patent	\$ _____	1205 18	2205 9	**Reissue claims in excess of 20 and over original patent	\$ _____	<b>SUBTOTAL</b>			<b>\$ 0</b>																																																																																				
	Extra Claims	Fee From Below	FEE PAID																																																																																																																																								
Total Claims	1 - 20* =	x 18	= 0																																																																																																																																								
Independent Claims	0 - 3** =	x 86	= 0																																																																																																																																								
Multiple Dependent			=																																																																																																																																								
Large Entity	Small Entity	Fee Description	Fee Paid																																																																																																																																								
Fee Code (\$)	Fee Code (\$)																																																																																																																																										
1202 18	2202 9	Claims in excess of 20	\$ _____																																																																																																																																								
1201 86	2201 43	Independent claims in excess of 3	\$ _____																																																																																																																																								
1203 290	2203 145	Multiple dependent claim, if not paid	\$ _____																																																																																																																																								
1204 86	2204 43	**Reissue independent claims over original patent	\$ _____																																																																																																																																								
1205 18	2205 9	**Reissue claims in excess of 20 and over original patent	\$ _____																																																																																																																																								
<b>SUBTOTAL</b>			<b>\$ 0</b>																																																																																																																																								
*for number previously paid, if greater; For Reissues, see above				SUBMITTED BY																																																																																																																																							
Name (Print/Type) <b>Mark P. Vrla</b>				Complete (if applicable)																																																																																																																																							
Registration No. <b>43,973</b> (Attorney/Agent)				Telephone <b>312-222-9350</b>																																																																																																																																							
Signature				Date <b>April 22, 2004</b>																																																																																																																																							

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) and application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450